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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,358	11/26/2003	Heiko Glienicke	4106-0132P	6146
2292	7590	12/16/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			CHOI, JACOB Y	
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FALLS CHURCH, VA 22040-0747			2875	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/721,358	Applicant(s) GLIENICKE ET AL.	
	Examiner Jacob Y. Choi	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2 & 4-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Glienicke (USPN 6,224,221).

Regarding claim 1, Glienicke discloses an optical light guide (6, 11) that includes two parts (6 & 11), which are partially separated by an annular slot (e.g., Figure 1), such that parts of the panel engage (e.g., 9) or project into the slot, a light rotor (1) that extends towards the optical light guide (6, 11) to a height necessary for light transport, and a light source (5) located below the light rotor (1).

Regarding claim 2, Glienicke discloses on the scale around the rotary knob of the control element are symbols.

Regarding claim 4, Glienicke discloses the corona may be illuminated as a luminous ring around the rotary knob as radios, air conditioning units, and the like in motor vehicles being operated.

Regarding claim 5, Glienicke discloses the brightness of the scale and corona is regulated by light-scattering components (diffuser) in the optical light guide (6, 11).

Regarding claim 6, Glienicke discloses the brightness of the scale and corona is regulated by an appropriate wall thickness in the symbol area (e.g., Figure 1).

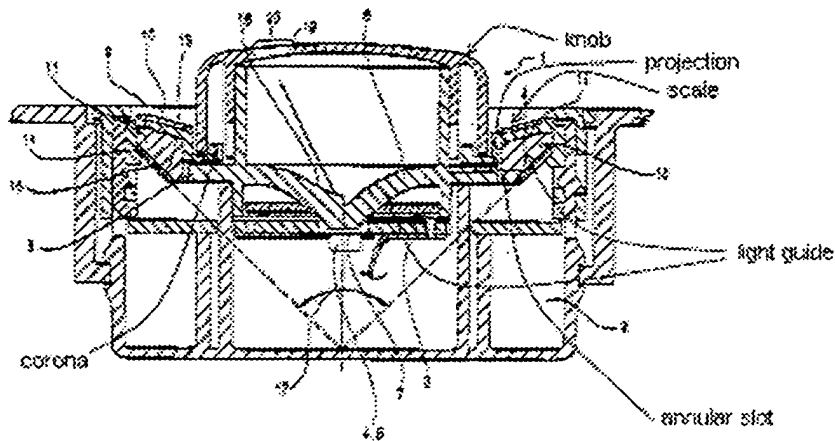
Regarding claim 7, Glienicke discloses the brightness of the scale and corona is regulated by at least one light-diverting bevel provided on an underside of the optical light guide on a circumferential side (e.g., Figures 3-4).

Regarding claim 8, Glienicke discloses the optical light guide is fixed relative to the control element (e.g., Figure 1).

Regarding claim 9, Glienicke discloses the optical light guide is adjusted in functional combination with the light rotor (1).

Regarding claim 10, Glienicke discloses the optical light guide and the light rotor are formed as a single piece (e.g., Figure 1).

Regarding claim 11, Glienicke discloses a rotary knob (1), a corona (9) substantially circumscribing the rotary knob (1), the corona being adapted to emit light therefrom, a scale (10) substantially circumscribing the corona and the rotary knob (1), the scale (10) being adapted to emit light therefrom, an optical light guide (6, 11) having an annular slot (e.g., Figure 1) provided therein, the annular slot being formed to receive a projection extending (e.g., 9) from the scale, the optical light guide (6, 11) directing light towards the scale and the corona, and a light rotor (1) that directs light from a light (5) source towards the optical light guide (6, 11).



Also, claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

In order to be given patentable weight, a functional recitation must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

Regarding claim 12, Glienicke discloses the scale completely circumscribes the corona and the corona completely circumscribes the rotary knob (1).

Regarding claim 13, Glienicke discloses the light rotor directs light towards the optical light guide from an outer perimeter of the light rotor (1).

Regarding claim 14, Glienicke discloses the scale includes at least one symbol formed thereon (e.g., column 3, lines 1-14).

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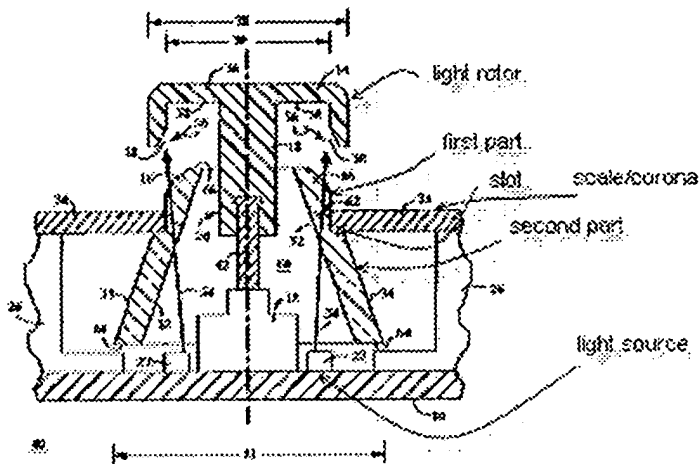
Regarding claim 15, Glienicke discloses a surface of the corona is formed to resemble a surface of the rotary knob such that a user is not able to detect the corona when light is not being emitted by the corona (when the light source is turned on/off).

Regarding claim 16, Glienicke discloses a surface of the corona is formed to resemble a surface of the scale such that a user is not able to detect the corona when light is not being emitted by corona (e.g., Abstract; *"as radios, air conditioning units, and the like in motor vehicles being operated"*).

Regarding claim 17, Glienicke discloses the light guide provides light to illuminate the corona (e.g., Figure 1).

3. Claims 1, 4-9, 16 & 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Zysnarski et al. (USPN 6,590,174).

Regarding claim 1, Zysnarski et al. discloses an optical light guide (e.g., 16; column 3, lines 1-20) that includes two parts (upper portion & lower portion; e.g., Figure 1), which are partially separated by an annular slot (e.g., 68), such that parts of the panel engage or project into the slot, a light rotor (14) that extends towards the optical light guide (16) to a height necessary for light transport, and a light source (22) located below the light rotor (14).



Note: claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA1974).

Regarding claim 4, Zysnarski et al. discloses the corona is illuminated in the night design as a luminous ring around the rotary knob and is not illuminated in the daylight design and thus very difficult or impossible to detect (e.g., Figure 5; column 6, lines 40-60).

Regarding claim 5, Zysnarski et al. discloses the brightness of the scale is corona is regulated by light scattering wall thickness in the symbol area (e.g., column 5, lines 1-35).

Regarding claim 6, Zysnarski et al. discloses the brightness of the scale and corona is regulated by an appropriate wall thickness in the symbol area (e.g., column 5, lines 1-35).

Regarding claim 7, Zysnarski et al. discloses the brightness of the scale and corona is regulated by at least one light-diverting bevel on an underside of the optical light guide on a circumferential side (e.g., Figures 1 & 4)

Regarding claim 8, Zysnarski et al. discloses the optical light guide is fixed relative to the control element (e.g., Figure 1).

Regarding claim 9, Zysnarski et al. discloses the optical light guide is adjusted in functional combination with the light rotor (14).

Regarding claim 16, Zysnarski et al. discloses a surface of the corona is formed to resemble a surface of the scale such that a user is not able to detect the corona when light is not being emitted by corona (14).

Regarding claim 17, Zysnarski et al. discloses the light guide provides light to illuminate the corona (e.g., Figures 4 & 5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zysnarski et al. (USPN 6,590,174).

Regarding claim 2, Zysnarski et al. discloses the claimed invention except for the details of the control elements being symbols.

However, Zysnarski et al. admits in "Background" invention that a knob has a transparent or translucent region that represents a symbol or a graphical form to provide a recognizable indicator of the knob during conditions of low ambient light (e.g., column 1, lines 10-30 & column 4, lines 15-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize symbols or graphical around the knob to provide recognizable indicator for the knob (e.g., Figure 5 & Figure 3; S16) to provide visual effect during low ambient light.

Regarding claim 3, Zysnarski et al. discloses the claimed invention, explained above. In addition, Zysnarski et al. teaches that the symbols are produced by a laser, injection-molding, or film technique (e.g., column 1, lines 10-30).

Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Regarding claim 10, Zysnarski et al. discloses the optical light guide and the light rotor are formed as two-portions.

Zysnarski et al. discloses the claimed invention except for the optical light guide and the light rotor is formed as a single piece. However, suggest that the knob and the light diffuser may appear to be one piece to a user (e.g., column 3, lines 50-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make both of the light guide (optical light guide & light rotor) into a single piece, since it has been held that forming in one piece an article which has

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formerly been formed in two pieces and put together involves only routine skill in the art.

Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

Response to Amendment

6. Examiner acknowledges that the applicant has amended claims 1 & 11. Claims 1-17 are pending in the application.

Response to Arguments

7. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ikarashi et al. (US 2002/0135994) – lighting device

Leveque et al. (USPN 5,359,165) – illuminated rotary switch assembly

Schuberth et al. (USPN 6,667,446) – rotary knob device with key function

Kneer et al. (USPN 6,682,201) – dial

Liao et al. (USPN 6,565,223) – integrated light transfer structure for providing

halo and end illumination for a control switch assembly


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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



JOHN ANTHONY WARD
PRIMARY EXAMINER